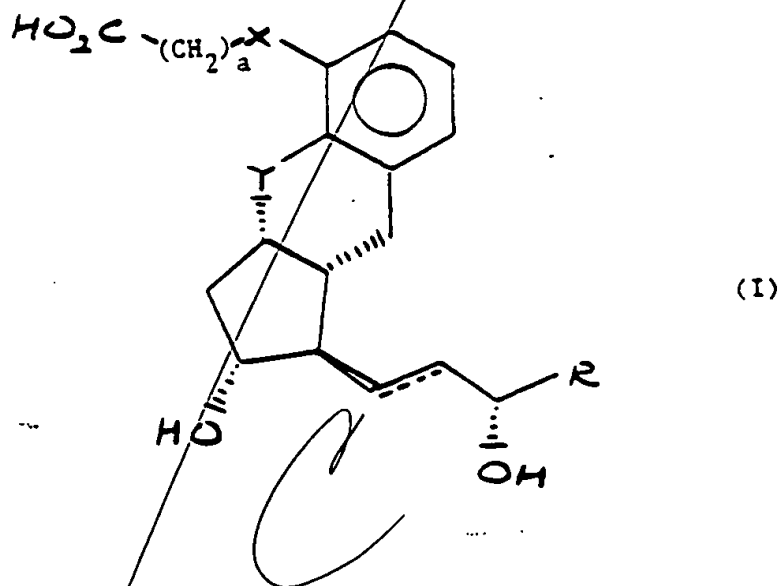


**CLAIMS**

1. A method for the prophylaxis or treatment of pulmonary hypertension which comprises the administration of a therapeutically effective amount of a compound of formula (I)



wherein  $a$  is an integer of from 1 to 3;

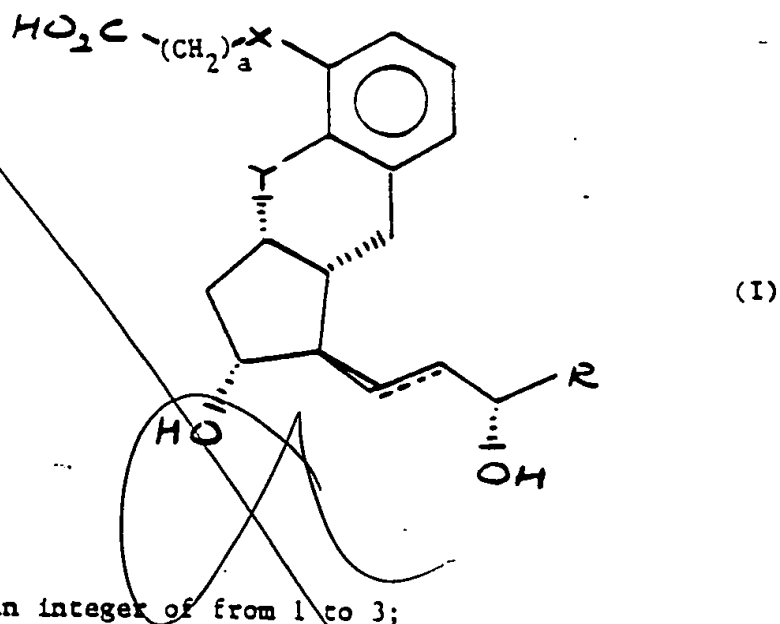
$X$  and  $Y$ , which may be the same or different, are selected from  $-\text{O}-$  and  $-\text{CH}_2-$ ;

$R$  is  $-(\text{CH}_2)_5\text{R}^1$  wherein  $\text{R}^1$  is hydrogen or methyl, or  $R$  is cyclohexyl, or  $R$  is  $-\text{CH}(\text{CH}_3)\text{CH}_2\text{C}\equiv\text{CCH}_3$ ; and

the dotted line represents an optional double bond;

or of a physiologically acceptable salt or acid derivative thereof.

2. A method for the diagnosis of pulmonary hypertension which comprises the administration of a diagnostically effective amount of a compound of formula (I)



wherein  $a$  is an integer of from 1 to 3;

$\text{X}$  and  $\text{Y}$ , which may be the same or different, are selected from  $-\text{O}-$  and  $-\text{CH}_2-$ ;

$\text{R}$  is  $-(\text{CH}_2)_5\text{R}^1$  wherein  $\text{R}^1$  is hydrogen or methyl, or  $\text{R}$  is cyclohexyl, or  $\text{R}$  is  $-\text{CH}(\text{CH}_3)\text{CH}_2\text{C}\equiv\text{CCH}_3$ ; and

the dotted line represents an optional double bond;

or of a physiologically acceptable salt or acid derivative thereof.

3. Method according to claim 1, wherein the compound of formula (I) is that wherein

Y is  $-\text{CH}_2-$ ;

X is  $-\text{O}-$ ;

R is  $-(\text{CH}_2)_4\text{CH}_3$ .

4. Method according to claim 2, wherein the compound of formula (I) is that wherein

Y is  $-\text{CH}_2-$ ;

X is  $-\text{O}-$ ;

R is  $-(\text{CH}_2)_4\text{CH}_3$ .

5. Method according to claim 3, wherein the compound of formula (I) is 9-deoxy-2',9 $\alpha$ -methano-3-oxa-4,5,6-trinor-3,7-(1',3'-interphenylene)-13,14-dihydroprostaglandin  $\text{F}_1$  or a physiologically acceptable salt or acid derivative of either thereof.

6. Method according to claim 4, wherein the compound of formula (I) is 9-deoxy-2',9 $\alpha$ -methano-3-oxa-4,5,6-trinor-3,7-(1',3'-interphenylene)-13,14-dihydroprostaglandin  $\text{F}_1$  or a physiologically acceptable salt or acid derivative thereof.

7. A diagnostic aid comprising a compound of formula (I) as described in claim 2, or a physiologically acceptable salt or acid derivative thereof, and one or more acceptable carriers and/or excipients, which is suitable for use in identifying PPH patients having active pulmonary vasoconstriction.
8. A diagnostic aid according to claim 7, wherein the compound of formula (I) is 9-deoxy-2',9~~x~~-methano-3-oxa-4,5,6-trinor-3,7-(1',3'-interphenylene)-13,14-dihydroprostaglandin F<sub>1</sub> or a physiologically acceptable salt or acid derivative of either thereof.
9. A diagnostic aid according to claim 8 which is adapted for intravenous administration or administration by transdermal iontophoresis.

Add B/